

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	M10948	Client:	Alaskan Copper Works
Date Received:	11/09/06	Project:	Metro Self Monitor, PO# M10948
Date Extracted:	11/13/06	Lab ID:	611120-01 10x
Date Analyzed:	11/13/06	Data File:	611120-01 10x.037
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	btb

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	91	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	349
Nickel	370
Copper	334
Zinc	50.6

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Alaskan Copper Works
Date Received:	Not Applicable	Project:	Metro Self Monitor, PO# M10948
Date Extracted:	11/13/06	Lab ID:	I6-423 mb
Date Analyzed:	11/13/06	Data File:	I6-423 mb.015
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	btb

Internal Standard:	% Recovery:	Lower	Upper
Germanium	86	Limit:	Limit:
		60	125

Analyte:	Concentration ug/L (ppb)
Chromium	<1
Nickel	<1
Copper	<1
Zinc	<1

**FRIEDMAN & BRUYA, INC.****ENVIRONMENTAL CHEMISTS**

Date of Report: 11/21/06

Date Received: 11/09/06

Project: Metro Self Monitor, PO# M10948, F&amp;BI 611120

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL METALS BY EPA METHOD 200.8**

Laboratory Code: 611077-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	ug/L (ppb)	22.4	23.5	5	0-20
Nickel	ug/L (ppb)	24.7	25.4	3	0-20
Copper	ug/L (ppb)	122	130	6	0-20
Zinc	ug/L (ppb)	96.4	97.3	1	0-20

Laboratory Code: 611077-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Chromium	ug/L (ppb)	20	22.4	207 b	50-150
Nickel	ug/L (ppb)	20	24.7	218 b	50-150
Copper	ug/L (ppb)	20	122	714 b	50-150
Zinc	ug/L (ppb)	50	96.4	276 b	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	ug/L (ppb)	20	106	70-130
Nickel	ug/L (ppb)	20	100	70-130
Copper	ug/L (ppb)	20	102	70-130
Zinc	ug/L (ppb)	50	97	70-130

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

November 21, 2006

DUPLICATE COPY

INVOICE # 06ACU1121-1

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M10948, F&BI 611120 - Results of testing  
requested by Gerry Thompson for material submitted on November 9, 2006.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc by Method 200.8 @ \$80 per sample	\$ 80.00
Rush Charges (48 hr) 50% of \$80.00	<u>40.00</u>
Amount Due .....	\$ 120.00

FEDERAL TAX ID #(b) (6)

61120

## SAMPLE CHAIN OF CUSTODY

ME

11-09-06

ADS

Send Report To

Gerald Thompson

Company

Alaskan Ocean Works

Address

628 S. Harbor St

City, State, ZIP

Seattle WA 98134

Phone #

206-382-8379 Fax # 206-382-4309

SAMPLERS (signature)

PROJECT NAME/NO.

Metro Self monitor

PO #

M10948

REMARKS

Page # of

## TURNAROUND TIME

☐ Standard (2 Weeks)☒ RUSH

Rush charges authorized by:

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS							
M10948	01	11/9/06	12:30	H2O	1													

Friedman &amp; Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\COC.DOC

## SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

## PRINT NAME

G. Thompson

Phan Phan

## COMPANY

ACEW

F&amp;B

## DATE

11/9/06

11/9/06

## TIME

2:20pm

2:20

Samples received at 21 °C

AKC-0007144

FRIEDMAN & BRUYA, INC.

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November 21, 2006

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on November 9, 2006 from the Metro Self Monitor, PO# M10948, F&BI 611120 project. There are 3 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ACU1121R